

Amendments to and Listing of the Claims:

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

1-5. (Canceled)

6. (Previously Presented) A switching power supply comprising:

at least two switching sections which have minuscule stop periods and repeat ON/OFF operation to convert an input voltage to an AC voltage;

a transformer which has a primary winding, to which the AC voltage obtained by the conversion performed by said switching section is applied, and a secondary winding, and stores exciting energy;

a synchronous rectifier section for rectifying a voltage induced in the secondary winding of said transformer by switching operation;

a smoothing section for smoothing the voltage rectified by said synchronous rectifier section to form an output voltage;

a PWM control circuit which forms a PWM signal for controlling said output voltage to determine an ON/OFF ratio of said switching section; and

a drive transformer for ON/OFF-driving said synchronous rectifier section according to said PWM signal or a voltage signal applied to said switching section, wherein

a first winding of the drive transformer is connected to the switching sections, and

the switching operation of said synchronous rectifier section is performed via the drive transformer by the energy stored in said transformer.

7-8. (Canceled)

9. (Previously Presented) A switching power supply in accordance with claim 6, wherein the PWM control circuit exercises control so that the switching section short-circuits the primary winding of the transformer, and sets the period during which energy necessary for the switching operation of the synchronous rectifier section can be retained in said transformer.